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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/531,817

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Toshiyuki Fukushima

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RATNERPRESTIA
P O BOX 980
VALLEY FORGE, PA 19482-0980

EXAMINER

SHEN, KEZHEN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/531,817	Applicant(s) FUKUSHIMA ET AL.	
	Examiner Kezhen Shen	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12 and 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 12 and 13, a program does not qualify as functional descriptive subject matter. However, by itself is non-statutory because without a computer-readable medium, the computer cannot be realized. (Interim Guidelines, Annex IV).

Regarding claim 13, it is dependent on claim 12 and fail to remedy the realizable aspect of the program as claimed. Hence, they are also rejected as per claim 13.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4,9-11,14,15 are rejected under 35 U.S.C. 102(b) as being anticipated by Tadayuki et al. JP 8-329469 A.

Regarding claim 1, Tadayuki et al. teach a recording and replaying apparatus, comprising: a drive controller (Drawing 1) which houses an optical disk holding identification information (47 of Drawing 1, memory), which is connected to an optical disk drive (24 of Drawing 1, CPU) which controls start-up of and recording and replaying on said optical disk, and which controls said optical disk drive ([0022] CPU is the controls means) and a disk

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information storage buffer (47 of Drawing 1, memory) which is connected to said drive controller (47 and 24 of Drawing 1) and stores use conditions which correspond to the identification information of an optical disk ([0022] memory memorizes recording parameter when recording data signals), wherein when use conditions which correspond to the identification information of an optical disk to be used are stored in said disk information storage buffer, said drive controller instructs said optical disk drive so that said optical disk drive executes first adjustment processing using said use conditions ([0022] disk ID is memorized on the memory, [0023] recording parameter will be based on the ID detected), and when said use conditions which correspond to the identification information of said optical disk to be used are not stored in said disk information storage buffer, said drive controller instructs said optical disk drive so that said optical disk drive executes second adjustment processing without using said use conditions ([0022] when ID is not recorded another recording parameter is asked for and used).

Regarding claim 2, Tadayuki et al. teach the recording and replaying apparatus according to claim 1, wherein use conditions obtained as a result of said first adjustment processing or said second adjustment processing are stored in said disk information storage buffer from said optical disk drive ([0022]-[0023] recording parameter from the ID).

Regarding claim 3, Tadayuki et al. teach the recording and replaying apparatus according to claim 1, wherein said use conditions for said optical disk are information which is used at the time of recording in said optical disk or replaying from said optical disk, said adjustment processing is processing of identifying use conditions for said optical disk to perform optimal recording or replaying on said optical disk ([0022] – [0023]).

Regarding claim 4, Tadayuki et al. teach the recording and replaying apparatus according to claim 3, wherein said information which is used at the time of recording or replaying is information regarding at least one of the power of laser, the pulse width of said laser and a servo condition ([0045] [0078] OPC and laser driving power are included in the recording parameter).

Regarding claim 9, Tadayuki et al. The recording and replaying apparatus according to claim 3, wherein said first adjustment processing or said second adjustment processing includes optimization of processing of recording or replaying in accordance with the temperature of said optical disk to be used or an ambient temperature ([0026] [0063] temperature).

Regarding claim 10, the limitations of the method have been analyzed and rejected with respect to the apparatus give above in claim 1.

Regarding claim 11, the limitations of the method have been analyzed and rejected with respect to the apparatus give above in claim 2.

Regarding claim 14, the limitations of the system have been analyzed and rejected with respect to the apparatus give above in claim 1.

Regarding claim 15, the limitations of the system have been analyzed and rejected with respect to the apparatus give above in claim 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject

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matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadayuki et al. as applied to claims 2 and 6 above, and further in view of Pereira US 2004/0160873 A1.

Regarding claim 5, Tadayuki et al. teach the recording and replaying apparatus according to claim 2, wherein the identification information of said optical disk includes at least one of an individual ID, a manufacturer name and a model number ([0089] serial number, drive ID), and said first adjustment processing includes first partial adjustment processing and second partial adjustment processing ([0022] – [0023] when ID is detected and when ID is not detected), when said ID of said optical disk is stored in said disk information storage buffer ([0022] disk ID is memorized on the memory), said drive controller instructs said optical disk drive so that said optical disk drive executes said first partial adjustment processing using said use conditions for said optical disk which correspond to said ID ([0022] disk ID is memorized on the memory, [0023] recording parameter will be based on the ID detected), when said ID of said optical disk is not stored in said disk information storage buffer and said manufacturer name and/or said model number of said optical disk is stored in said disk information storage buffer ([0022] when ID is not detected), and use conditions obtained as a result of said first partial adjustment processing or said second partial adjustment processing are stored in said disk information storage buffer from said optical disk drive ([0022] the recording parameters recovered based on the ID is used as the recording parameter). Tadayuki et al. fail to teach said optical disk drive executes said second partial adjustment processing using said use conditions for said optical disk which correspond to said manufacturer name and/or said model number.

Pereira teaches to associate the manufacturer information with a corresponding write strategy of the optical drive (Pereira [0014] – [0015]). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of the recording and replaying apparatus as taught by Tadayuki et al. with the teachings of incorporating a write strategy with the manufacturer's information as taught by Pereira to as a whole to utilize manufacturer's information to decide the write strategy for the benefit of faster write time.

Regarding claim 7, Tadayuki et al. fail to teach the recording and replaying apparatus according to claim 6, wherein said disk information storage device stores said use conditions for each optical disk type and/or each optical disk manufacturer, corresponding to at least one of a manufacturer name, a model type and software information related to said recording and replaying apparatus and hardware information and software information related to said optical disk drive.

Pereira teaches to associate the manufacturer information with a corresponding write strategy of the optical drive (Pereira [0014] – [0015]). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of the recording and replaying apparatus as taught by Tadayuki et al. with the teachings of incorporating a write strategy with the manufacturer's information as taught by Pereira to as a whole to utilize manufacturer's information to decide the write strategy for the benefit of faster write time.

Claims 6 and 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tadayuki et al. as applied to claim 3 and 14 above, and further in view of Hamasaka et al. 5,485,439.

Regarding claim 6, Tadayuki et al. teach the recording and replaying apparatus according to claim 3, wherein said drive controller is capable of accessing a disk information

storage device which stores the identification information of said optical disk and use conditions which correspond to the identification information ([0022]), and when use conditions which correspond to the identification information of said optical disk to be used are not stored in said disk information storage buffer ([0022] when ID is not recorded another recording parameter is used), said drive controller instructs said optical disk drive so that said optical disk drive acquires use conditions which correspond to the identification information from said disk information storage device and executes said first adjustment processing using said use conditions instead of executing said second adjustment processing ([0022] the alternative is a recording parameter input by the user). Tadayuki et al. fail to teach the accessing through a telecommunication line.

Hamasaka et al. teach the use of a telecommunication line to communicate between the optical disk device and a host system (Fig. 1, Col 6 Lines 6-31). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of the recording and replaying apparatus as taught by Tadayuki et al. with the teachings of communication between the memory and disk drive through a telecommunication line as taught by Hamasaka et al. as a whole to use the telecommunication line to communicate between the host system and the disk drive for the benefit of managing write strategy of disk drives through the network.

Regarding claim 16, the limitations of the system have been analyzed and rejected with respect to the apparatus give above in claim 6.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tadayuki et al. and Pereira US 2004/0160873 A1 as applied to claim 7 above, and further in view of Hamasaka et al. 5,485,439.

Regarding claim 8, Tadayuki et al. and Pereira both fail to teach the recording and replaying apparatus according to claim 7, wherein said information stored in said disk information storage device can be updated through said telecommunication line.

Hamasaka et al. teach the use of a telecommunication line to communicate between the optical disk device and a host system (Fig. 1, Col 6 Lines 6-31). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of the recording and replaying apparatus as taught by Tadayuki et al. and Pereira with the teachings of communication between the memory and disk drive through a telecommunication line as taught by Hamasaka et al. as a whole to use the telecommunication line to communicate between the host system and the disk drive for the benefit of managing write strategy of disk drives through the network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kezhen Shen whose telephone number is (571) 270-1815. The examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TAN Xuan DINH/
Primary Examiner, Art Unit 2627
September 25, 2008

/Kezhen Shen/
Examiner, Art Unit 2627